# HEALTH CULTURE

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INHEALTH

IN SICKNESS

IN YOUTH

IN MIDDLE LIFE

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27 Illustrations of Simple Exercises that will use all organs and functions and restore and maintain Health and

Treatise on of Life. Strength.

Valuable advice for the young, the old and those of middle life, for the athlete and invalid

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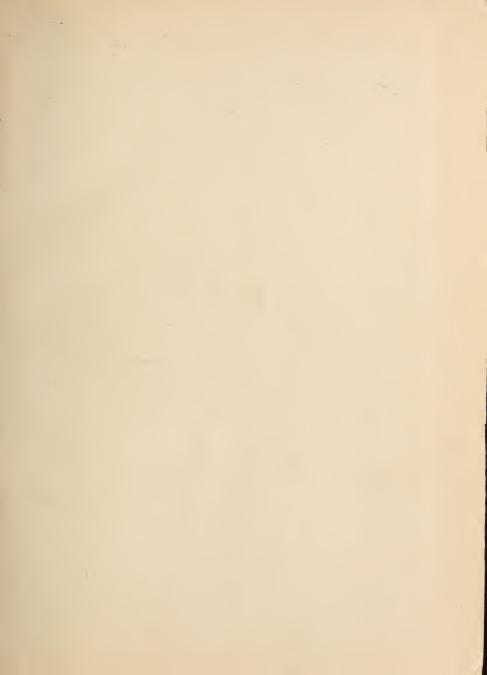


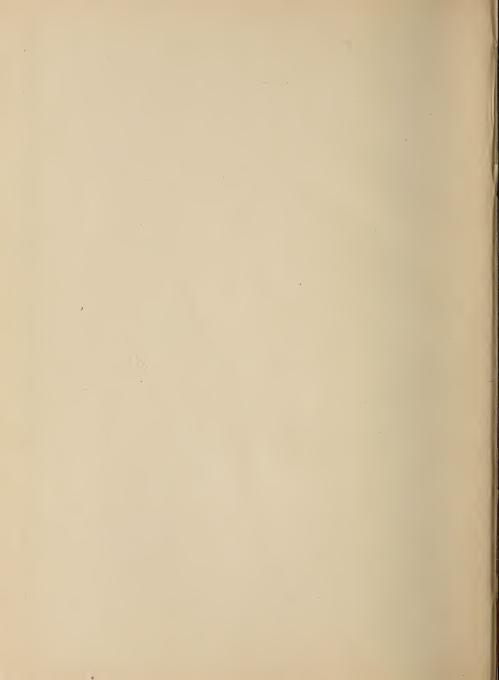
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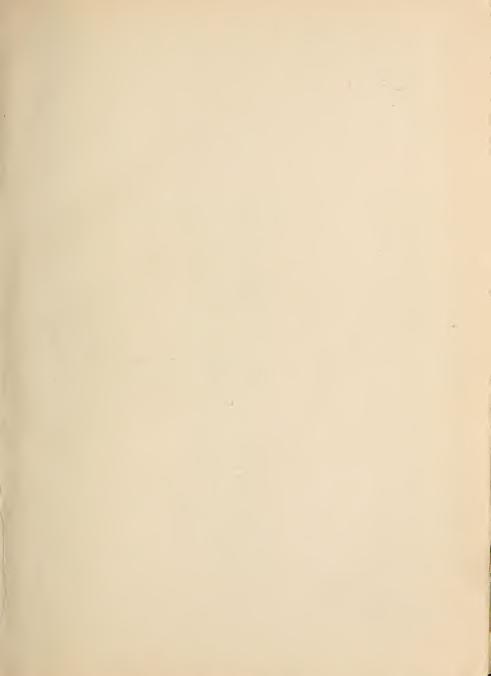
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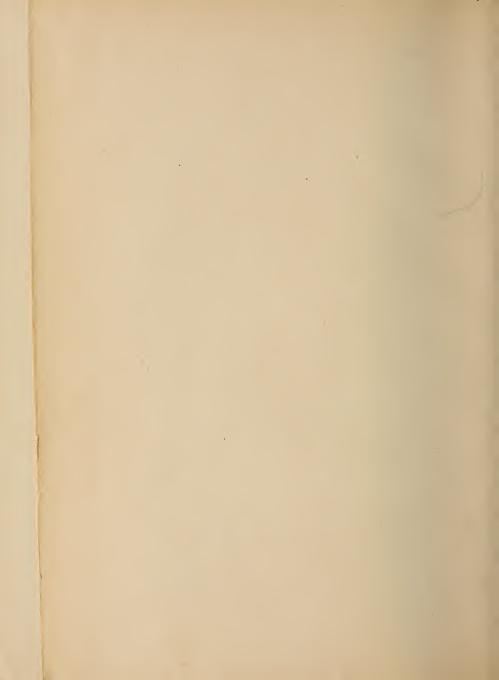
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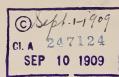
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### INTRODUCTION

How to live, what to eat, to wear, to do, how to breath completely, to work and play, to rest and recreate, to exercise and bathe, to achieve perfect bodily and mental vigor is a highly important proposition.

Health is the natural condition of all animal life and is the greatest of earthly assets. Upon it depends all human happiness, success and prosperity.

Disease is an abnormal condition, superinduced by ignorance, carelessness or vice, and is as disgraceful as illiteracy, or drunkenness.

Every individual is the architect of his own strength and elasticity, and the responsibility of enjoying health or suffering disease rests with himself.

All failures and misfortunes are due to ill health; all success and prosperity to health, energy and magnetism.

There is an old Scotch saying that "At forty a man is his own physician or a fool".

The philosophy of learning how to live and what to do, to maintain or recover and prolong health, strength and youth is the most important thing on earth to every living creature, and this volume is a response to a wide spread demand for information of this character: there is really nothing of which the masses know so little, for the principles of this vital subject have been practically limited to the medical fraternity whose whole compensation comes from those in ill health. It is no fault of the able physician that his chief function is to restore health to those whom ignorance of its laws has led to disease by improper methods of living, through want of fundamental rules.

There is, however, at this time a universal awakening to the truth that an "ounce of prevention is worth a pound of cure", that it is infinitely better to prevent weakness and disease and premature old age by logical principles, and retain the joys of health and youth, than to suffer futile remedial efforts to effect a cure.

The practitioner of the future will find the services of his noble calling devoted wholly to preventing sickness, to deferring the period of senility and its impending infirmities and sorrows, which are dreaded even more than death; the ablest men of this learned profession are already advocating the beneficience of teaching the people how to live, what to eat, to wear, to do, in health, in sickness, in youth, in middle life and in old age, to achieve the greatest efficiency and happiness:

Live each day that the golden moments may produce the best results.

It is now generally conceded that nature and not medicine does the healing; the modern method of the medical profession is to place the patient in a proper attitude toward the laws of nature, to allow the healing process a chance; the rest cure which is so generally practiced throughout the nation by the ablest physicians is merely carrying out this theory. But it may be done infinitely better and cheaper by a sojourn at the seashore or mountain resort,

and thus avoid the dreariness of months within hospital walls.

A prominent physician who recently returned from a European vacation, said: The Europeans, especially the English and Scotch, were far in advance of Americans in the practice of the fine art of living; he declared they studied the laws of nature and lived properly, and that the physical habits of the people generally were infinitely better than Americans. They live in a cool atmosphere the year round, which improves digestion and the quality of the blood, creates a clear complexion and renders one immune from colds and catarrh.

At the International Tuberculosis Congress at Washington on Sept. 29, 1908, the eminent Surgeon General Simon Von Unterberger, of St. Petersburg, Russia, honorary physician at the czar's court, contributed his views on "heredity in tuberculosis" as follows:

"All tendency to disease that appears in any individual is to be regarded as heredity, whether or not the corresponding disease can be traced back each time to parents or ancestor. The tendency to consumption is inherited and may be developed by various agencies. Numerous autopsies show that every man over 30 years of age has old remains of a tuberculosis infection. These facts show how comparatively easy the human organism can overcome the tubercular bacilli and give us the indication for our treatment, the strengthening of the organism by hygenic and dietitic means. We must seek to destroy the tubercular bacil, lus, but our chief endeavors must be directed toward strengthening the body."

The body is strengthened by proper food, proper breathing and exercise: the fluids of the body require constant changing from one part to another, otherwise they become stagnant like a pool of water; when a muscle is contracted the fluids are pressed out of the muscles and tissues like squeezing a wetted sponge; when relaxed the fluids go back again and the change creates and maintains a condition of freshness and healthfulness; when no exercise is taken the fluids become stagnant and inflamation and deterioration ensues.

Every individual should build a strong, vigorous constitution in youth, that he may be prepared to resist the effects of modern business and social life. If youth has already passed, prepare to meet the infirmities and sorrows of later years with a healthy body and a strong mind that will lighten the deepening shadows of later years.

Dr. Metchinikoff, a French physician and scientist, says that old age is curable, or at least that its effects may be deferred to an indifinite period by proper living. He declares that the principal causes or premature old age are excesses, especially overwork of the body or brain, or the stomach and digestive apparatus; excessive use of alchohol and tobacco, all of which directly or indirectly increase bacterial fermentation in the intestines. The learned scientist declares that the secret to health and long life is a good capacity for breathing, strong digestive power, a cooling diet of vegetables, fruit and dairy products, which diminish as much as possible the intestinal bacteria. Moderation in all things, he says, will materially assist in warding off the

dreaded effects of the creeping years.

There is nothing new or radical in this volume, but it is rather a collection of well known scientific facts to be used as a mentor or standard guide to preserve, and to recover and retain health and strength.

The principles here set forth are those which have been followed in part, if not wholly, by persons who have lived beyond the allotted period of life, and who have retained strength, vitality and youth to extreme old age.

The practice suggested is not a rigid regime of simple life of fasting and labor calculated to deprive one of life's pleasures and all its joys, but, on the contrary, it is a natural order of agreeable sensations intended to increase the acuteness of the senses, to rid the system of the dead and effete matter and replace it with new life and vigor and recreate the body anew and endow the whole being with new life, new hopes and ambitions, and an abounding health and youthful vigor which will bring a full realization of the keen joys and happiness of life, which will, in fact, be to hu-

man life what spring is to nature, when it brings back the green grass, and the flowers, and sheds the effulgence of nature over the face of the earth.

The only difference in men is that created by mental and physical culture.

Don't grow old and rheumatic through negligence or ignorance.

Don't worry or hurry. Everyone should have a hobby, that will exercise the mind and body, and use all the intricate parts of the anatomy that the whole being may be kept in harmony.

"You have but one day to pass upon the earth: order it so you may pass it in peace."

Eat, sleep and exercise moderately; breath abundance of fresh air.

### THE PRINCIPLES OF LIFE

The principal functions of life are respiration, circulation and elimination.

The secret of life lies in consuming sufficient oxygen to circulate the blood and digest the food.

Someone has said that the human system is similar in its requirments and operation to a hot-water heating plant.

Respiration furnishes the system with air and oxygen, which unites with carbonic gases in the body and furnishes the heat which burns, digests and consumes the food and causes the heart to circulate the blood through the system. Everyone knows the furnace will not burn without a full supply of air, and that it must be free from ashes and refuse matter which clog and retard its effectiveness; so the human body must have an ample supply of fresh air and be freed of the ashes and the waste matter at regular intervals by a method of elimina-

tion which in health is thrown off by the bowels, the kidneys and the lungs and the pores of the skin.

The temperature of the animal body is regulated by the conditions which surround it, the same as the thermostat regulates the furnace, otherwise it would not adjust itself to the intense heat of summer and the frigid degrees of winter.

When the body is surrounded with a high temperature, the heat making faculties within are shut off, and when subjected to a low temperature the heat-making faculties within are hard at work to increase the temperature of the body to resist the cold.

It is, therefore, evident that those who spend most of their hours in overheated rooms are not able to stand the rigors of winter with the same degree of comfort and or spend much time in the open air.

# RESPIRATION

Respiration is, figuratively the fiirst and literally the last act of life, and the most important. Health and longevity depend wholly upon proper breathing and yet few people realize its importance and far reaching effects. In fact the majority of people do not breathe correctly, never having been taught this fundamental principle of life, and having given the matter no thought or consideration.

Deep and regular respiration moves the heart to a proper performance of its work, circulates the blood through all the arteries and veins to the ends of the capillaries and gently exercises and nourishes all the organs and every nerve and fibre of the body.

Anyone who breathes deeply, regularly and properly all the while, must of necessity have perfect health, and an eminent authority has said that all disease has its origin in imperfect breathing.

An erect posture and carriage materially assists and is in fact absolutely necessary to proper breathing, as it is also useful to the free and full action of all the organs of the body.

#### HOW TO BREATHE COMPLETELY

Respiration being the first act of life, suggests that the first lesson in useful exercises should be one in proper breathing, which in itself is most beneficial stimulating and exhilerating.

This simple act may be practiced at any time and place in the home, the office, store or shop, or on the street, but it is of most benefit out of doors where the air is pure and fresh. It may be performed with greatest ease and to most advantage in a standing position, but the habit should be acquired so that one may breathe properly while sitting or standing.

Begin by standing erect; draw the body to its full height; throw the chest out and raise it and also the stomach and abdomen; take a long deep breath, which, for illustration, may be divided in three inseparable parts, first by inhaling in the lower part of the lungs, second in the central part, and third in the upper part or chest; inflate each fully and thoroughly; seven or eight long deep inhalations of this kind at intervals during the day will in a very short period of time establish a habit of proper breathing.

If you practice breathing while walking on the street, a good suggestion is to hold the breath as long as possible and to lengthen the period each time by counting the number of steps you take while holding the breath; this will afterwards compel you to breathe deep and hard; it is of vital importance that all the air be exhaled each time before a new deep breath is drawn into the system.

A moment's time spent in this invigorating life giving recreation in the open air, morning and evening and during the day, if one feels in the humor, is of inestimable value to any person of any age or condition of life and takes the place of both physical and mental exercise. It will increase the heart's action, improve the circulation, vit-

alize the blood and digest the food and warm the entire system, and throw off the gases and impurities of the system through the lungs and the skin, and give tone and energy to all the organs. It has been said by some authorities that the principal benefit derived from physical exertion is to cause deep and prolonged breathing.

The benefit derived from breathing depends as much upon the quantity as the quality of the air taken into the system.

You will doubtless be surprised to learn by this practice that the system will be quickly and thoroughly warmed, even in the coldest weather, and if you are at any time long exposed to a low degree of temperature where you cannot keep warm like riding in an open conveyance or a cold car, you may easily and effectively prevent a severe cold by full deep and regular breathing.

Never breathe with the mouth open, but always close it firmly and breathe through the nose, which is the natural air passage.

An abundance of pure air is a vital nec-

essity and the custom of sleeping out of doors is becoming prevalent among intelligent people everywhere, even in the coldest climates.

# CIRCULATION

The mechanism of the body requires a free circulation of the blood to all parts, which are fed and nourished by it. Any part of the body to which the blood does not flow to and through freely becomes stagnant and dormant, and in a brief time the stangnation causes inflammation and disease, which can be restored only by a free circulation of pure blood.

Fresh air and exercise are necessary to proper circulation, and proper circulation is an absolute necessity to health of the body as a whole, and to each and all of its intricate parts.

In all ages of the world's history various external mechanical operations have been practiced upon the body, both as a luxury and as a means of relieving chronic ailments, and it is practiced more generally today than in any other age, proving conclusively the value of the theory of proper ex-

ercise which will bring into daily use all the parts and organs of the body.

Never permit physical labor to overcome reasonable mental exercise, and do not at any time allow mental effort to prevent a proper amount of physical exertion.

A proper admixture of mental and physical exercise in youth and middle life will bring vigorous and joyous old age, and when the shadows fall they will be brightened by the sunshine of health and vigor.

#### **ELIMINATION**

Unless the system throws off the waste matter thoroughly it becomes clogged and diseased.

Nutritive matters after being reduced by digestion are prepared to pass through the digestive apparatus into the blood, but there must first be a demand in the tissues for the materials.

The constant wastes caused by muscular action and the expenditure of the blood which is always taking place in health, must be made good with materials from the digestive surface, and muscular action is a necessity to keep the membranes in order.

Nature causes the entire alimentary canal to take on a sort of rythmical motion. The ordinary duties of life accelerate this motion of the canal and keep it in order, but in sedentary occupations where the activities of life are lessened, the health suffers to a corresponding degree. Absorption from the alimentary canal is imperfect and the digestive organs become clogged and weak-ened.

Muscular action moves the fluids, urges the blood into the skin and lungs, the two principal excretory organs, through which the products to be eliminated are thrown off.

The same action results in the production of an important element of the urinary excretion without which this fluid cannot be of normal quality. The channels for this principle are kept open and free by exercise.

It is a well known fact that the most common cause of constipation is want of muscular strength and action of the alimentary canal; the expulsion of the effete matter from the bowels being wholly muscular.

Weakness of the muscular coat of the alimentary canal, and a defective power of the lower section of the spinal cord are partly from want of nervous supply.

In brain workers it is caused by the nervous fund being too largely drawn upon.

from other quarters, the brain and the stomach.

The proper method of overcoming this is to exercise the muscles of the back and the stomach.

The lower section of the spinal cord should be roused to action by muscular force.

It often happens that there is congestion in some portion of the canal, which causes a deficiency of secretions; this calls for exercise and development of the abdominal muscles, to draw the blood from the congested parts.

In middle and after life the majority of people grow large and fat about the abdomen and waist, which condition is due wholly to lack of exercise of the muscles of this portion of the body, and there is no portion of the body which needs more exercise and gets less in the ordinary duties of life.

The liver is generally torpid and congested, indicating imperfect oxydation of the blood and a retention of matter that ought to be thrown off, through the lungs, the skin, the kidneys and the bowels. The tissues lack moisture, the refuse of the system is not properly reduced to carbonic acid and water. The treatment for such a condition is to increase respiration and lesson the amount of food and exercise the muscles of the abdomen and back.

In this condition the feet and hands are usually cold and exercise which will cause a free circulation in the extremities is necessary.

Drugs are of no value in constipation; while they wash out and clean the clogged parts, they soften and weaken the muscles of the alimentary canal and create a chronic condition of constipation; furthermore; cathartics stop nutrition and necessarily cause a decline in strength.

The effect of a cathartic is the same as abstinence from food, but the latter is better.

Exercise, deep breathing and proper circulation will, however, completely cure constipation in time.

## **EXERCISE**

Physical and Mental

is an absolute necessity to health and vigor. Any organ or function of the body that remains unused for any considerable length of time becomes weak and emaciated and in time loses its vitality altogether, and becomes diseased and ultimately effects other parts of the anatomy until the whole structure becomes undermined.

Physical exercise alone does not meet all the requirements; and a reasonable amount of mental labor is necessary to complete health and strength.

It is for this reason that laborers, mechanics, farmers and others whose occupation gives them an excessive amount of physical exercise, frequently suffer from ill health, because they become so severely taxed with too much physical effort that they make little or no mental effort; then, too, the special kind of labor one may be compelled to

perform may use only one set of muscles and while these are thus overworked many others may fall into disuse entirely.

There is no calling in life that will bring all the organs and functions of the anatomy into proper use, and no occupation that will take the place of proper physical and mental exercise.

It is an erroneous idea to presume that hard mental and physical labor are necessary, for the contrary is true.

The daily use of every part of the system for two or three minutes will keep it in perfect order and is sufficient to maintain complete mental and bodily vigor to almost an indefinite period of time.

#### RECREATION

Work and Play.

In moderation recreation is as necessary to perfect health as exercise.

Proper and sufficient recreation brings a beneficial change to both mind and body; its first effect is mental, which controls and affects all parts of the body.

A man or woman with a hobby is invariably healthy and happy, for there is no kind of recreation which furnishes such strong mental stimulus. One whose mind dwells wholly upon one absorbing topic of life, using only one part of the brain, cannot enjoy complete mental vigor, nor can such a mind be as strong as the brain that is used for all the purposes for which it was intended in all its divisions and parts.

The man with one absorbing passion will find little recreation at the seaside, or in the mountain retreat. Proper mental exercise will enable one to concentrate all his efforts upon the one thing he may be engaged in, never attempting two things at once. When he takes up another matter he will drop everything else and devote himself again to the last matter, and thus make himself master of anything he may undertake, without excitement or worry.

Such a person will be strengthened and benefited with a hobby that will furnish recreation at frequent intervals.

You may rely upon one of this class devoting himself assiduously and intelligently to any task assigned to him, with no fear that he will carry the cares of the day to his home and family and to places of recreation and pleasure.

For places of responsibility and trust select the man who has so trained himself that he may devote himself wholly to one thing at a time, forgetting everything else. One who works and plays at will.

# REST

is generally accepted as meaning sleep, or at least lying or sitting down; as a matter of fact a change from one thing to another is rest. After protracted mental exertion vigorous physical exercise is rest.

One who has been employed all day at a desk may find himself completely enervated and jaded and wholly unfit for further effort, but a half hour of brisk walking in the open air will reinvigorate one of normal health to his usual buoyancy of mind and body.

One who is tired and worn from physical exertion will find complete rest in mental effort.

#### SLEEP

Nature's perfect rest and restorative, however, is sleep, a proper amount of which is absolutely necessary to all animal life.

There is nothing more destructive to the nerves and tissues than loss of sleep, and nothing more beneficial and refreshing than a proper amount of sound sleep.

Too much sleep clogs the organs and deadens the nerves and makes one drowsy and heavy, a similar effect to that caused by insufficient sleep.

Eight hours of sleep is generally accepted as the proper amount required by most persons, yet the amount required varies with the mental and physical condition, the age, temperament and occupation of the individual.

Young people require more than the older ones. While some persons of delicate constitution require nine or even ten hours sleep for complete reinvigoration, others find six hours of sound, refreshing sleep all that is necessary.

The man who can retire at midnight and sleep soundly until six o'clock in the morning and awake fully rested and refreshed is generally one of great mental and physical activity, who will be found alert and energetic during all of his waking hours; he will be quick and keen in his judgment of things and will never regret his prompt decisions.

Each individual may easily decide for himself what amount of sleep is best by watching the effect which it has upon him.

If one awakes in the morning feeling thoroughly refreshed after his sleeping hours, he has had sufficient sleep; if he still feels tired and drowsy he should aim to sleep a longer number of hours. The habit of sleep, however, is cumulative and the more one sleeps the more he seems to require. No one in normal health should sleep more than eight hours out of twenty-four.

### A CHEERFUL DISPOSITION

If you would espouse but one thing in life, let it be a cheerful disposition, for there is ,nothing so highly conducive to health happiness and longevity, and it is in fact a prerequisite to success and prosperity, and is the easiest thing in the world to acquire.

An irritable, despondent disposition is most destructive to human life and happiness; it absolutely destroys all chances of success; it is unnatural and grows by cultivation.

The old German author and philosopher Berthold Auerbach says: "If one is not content with the things which he has, he will be no happier if he secures what he thinks he wants."

It is a well known scientific fact that the varying moods of fear, courage, anger, hatred, jealousy, discouragement, cheerfulness, love and hope have a marvelous and deep seated effect upon the anatomy. Sudden

fear and anger seriously affect respiration and the action of the heart, and have a correspondingly depressing effect upon the entire system, and if continued for any considerable period of time bring about conditions of disease, old age and death; while cheerfulness, love and hope stimulate the mind and body without limitation.

One who is fearful and discouraged becomes weak and impotent and can accomplish little, even with most severe and protracted effort, and in time will become afflicted with all the ills and misfortunes of life.

A cheerful and hopeful disposition creates a condition of buoyancy and energy, which vitalizes both mind and body and renders most interminable tasks easy, natural and pleasant.

Disposition is not an inborn condition, but wholly a matter of habit, which begins with a habitual faultfinding.

A simple matter of mental control; if then you would be healthy and happy avoid all tendency to ill nature, anger and worry, and cultivate a spirit of cheerfulness and hope for every task and ordeal, and for every condition of life; don't let anything annoy or worry you.

An old philosopher who died at the age of ninety years said that he had discovered that none of the things which had annoyed and worried him in his long life, and none of the ordeals that he had dreaded, had ever taken place, but that all the misfortunes and sorrows that befell him had come suddenly and unexpected.

Worry and despondency will not avert nor assist in overcoming the perplexing problems of life, but on the contrary will bring about, or at least hasten the evils which are most dreaded and feared.

There is no fate that is bad as is anticipated: in fact one is always prepared to meet any ordeal of life when compelled to face it; even death, the greatest tragedy of life, which is most dreaded in health and happiness, scarcely enforces a shudder when one comes at last to meet this inevitable destiny of every living thing.

Men will flinch at the thought of leaving peaceful homes and joyous throngs of friends to face the cannon's roar and shell, or to mount the scaffold to ignominious death, yet countless millions have endured these ordeals with strength and courage, with less fear than many of the petty affairs of daily life which worry and distract men's souls and carry them to untimely end.

Don't go through life with a sorrowful, gloomy countenance, which depresses those with whom you come in contact and reacts with cumulative effect upon yourself, but meet every ordeal with courage and hope; don't worry about the things that may never happen, for as it has been appropriately said, if you can't help it, it won't do any good to worry and if you can help it, it is unnecessary to worry.

An habitually cheerful disposition will create and maintain a character of energy, force and magnetism that will make your presence felt and appreciated in every circle you may enter in the home, the office, the club, the store, factory or society; it will strengthen your will power and give you absolute control over yourself and others, and enable you to make any kind of

sacrifice with complacency and independence.

Evil thoughts are highly injurious; think kind and friendly things, which are soothing to mind and body. Let your first awakening thought of the day be a pleasant one, and it will have a material influence upon you and your affairs throughout the day. Then upon retiring at night if you covet sound and refreshing slumber, set yourself at peace with God and his creatures; let your last impression of the day and its deeds, of life and its problems, of the things that are gone, and those that may come, be one of cheerfulness and hope, and you will find it soothing and restful.

The daily practice of this exhilerating mental exercise will secure for you the habit of being cheerful, which is the perfection of earthly happiness.

### **PURE WATER**

is a matter of considerable importance, both for drinking and bathing.

The body consists of four parts of fluids, and one part of solids, and yet many people drink little or no water, and then express intense surprise that the system becomes deranged through improper internal cleansing.

A proper supply of water in the system flushes the kidneys and bowels and enables them to carry off the effete matter; pure water contains a very considerable amount of oxygen and enriches the blood and materially assists all the organs and functions. It has a highly beneficial effect upon the skin and the pores and also improves the nervous system; it maintains the proper proportions of fluids and solids; it is the best solvent for food and immeasurably assists digestion.

Every healthy person should drink one glass of water during each meal; a larger quantity may perhaps weaken the gastric juices and may retard instead of assist digestion.

Water taken with food has a tendency to fatten and increase the weight and large quantities taken with the meals is frequently the cause of large stomachs and corpulency.

About eight glasses of pure water should be drank every day. The best time to drink it is about two hours after meals and every hour afterwards. Assuming the meals are five hours apart, then three glasses may be drank in the morning, three glasses in the afternoon, and two or three at night.

Many watering resorts restore thousands of people to health every season, not because the particular water possesses any special medicinal value, but because people go there to drink it; it is the proper and fashionable thing to do there, and they all drink large quantities of it regularly and systematically. Many of them have an

abundance of pure water at home and could receive the same benefit by drinking the same quantity.

Water which contains the least amount of lime is best. The Hon. Joseph Medill, former editor of the Chicago Tribune, wrote a very scholarly treatise some years ago in which he clearly illustrated the fact that old age and death were due wholly to lime taken in the system, which caused a hardening of the arteries and tissues, and he claimed that lime was encrusted in the system principally by drinking hard water. Soft water, or spring or lake water is best.

#### DIET

#### WHAT TO EAT

depends to a large extent upon the opportunity and ability to digest food, and the digestive process depends upon the ability of the tissues and the blood to assimilate their share of the food matter, all of which depends upon the amount of oxygen consumed and the amount of waste matter thrown off, and the amount of oxygen consumed depends upon proper exercise and proper respiration.

The process of digestion begins in the mouth, the linings of which immediately begin to absorb the portion of the food required to nourish the parts fed by this portion of the digestive apparatus and it is then passed along the alimentary canal each portion of which absorbs its own requirements.

Food taken without appetite and without relish is a positive injury to the system, for a lack of appetite clearly shows that there is no demand in the system for more food.

When food enters the empty healthy stomach it is at once formed into a liquid mass called chile, which is passed along the alimentary canal and is by a sponge like process absorbed or assimilated in its passage by each of the various parts which assimilates enough for its own purpose, until finally all the nourishment of the food is absorbed and the refuse is thrown off through the bowels, kidneys, skin and lungs.

If the system has not received sufficient oxygen and exercise to remove the waste matter from the blood and tissues, they cannot absorb anything from more food, and under such circumstances it passes along the alimentary canal without absorption or digestion, and then becomes odorous, gaseous, defective, in fact it becomes a poisonous mass which polutes and deranges the entire system.

It is, therefore, plainly evident that too much food, or rather food taken in the stomach when there is no demand for it, is a very serious matter to health and longevity.

Dr. Abernethey, the famous English physician, one hundred and fifty years ago, said to a wealthy nobleman who consulted him for a chronic ailment: "Live on six pence a day and earn it", thus proving conclusively that it was well known to the medical fraternity in those early days that too much food without exercise was highly injurious.

The amount of strength and endurance one may have for mental and physical effort is due in a large measure to a proper amount of wholesome nourishing food.

Too much food causes a general clogging of the organs and is the first cause of constipation from which begin most of the ills of life.

An insufficient supply of food causes emaciation and weakens the entire system.

It may be said, however, that more persons suffer from too much than too small a quantity of food.

The amount and character of food required depends:

1st. Upon the state of the health.

2nd Upon the age of the person.

3rd. Upon the occupation.

4th. Upon the amount of fresh air consumed.

One in ill health should take small quantities of light but nourishing food, consisting largely of cereals, eggs and milk.

In early life before the tissues are fully matured a considerable quantity of nourishing food is required to develop them; then the waste matter is thrown off more easily in youth and middle life.

When the tissues have reached maturity and middle or later life is attained, the process of eliminating the waste matter is slower and less food is required as the years roll away.

Those engaged in physical labor require a considerable quantity of solid foods, such as oatmeal, corn bread, vegetables and meats.

Persons engaged in mental and sedentary occupations should select food with

greatest care and should eat sparingly of meat and heavy foods.

Those who are fortunate in spending much time in the open air have little difficulty with complete digestion and may eat with little restraint, for there is scarcely anything more conducive to perfect digestion than breathing large quantities of pure fresh air for a long period of time.

It is utterly impossible to state definitely the quantity and character of food that may be best adapted to each person, for it is a well known fact that food that is most beneficial to one person may be highly injurious to another, but each person may intelligently decide the problem himself by a very simple test.

If one feels better after eating he has taken the proper amount of food best fitted to his condition; if he does not feel as comfortable afterward, if he feels tired or drowsy, it is apparent that his digestive apparatus is having difficulty in taking care of an unnecessary burden of too much food, or of a character not easily assimilated and not adapted to the system.

One should always cease eating before the appetite is fully satisfied, at least before the walls of the stomach are considerably distended.

You may easily detect overfed persons by the bloated appearance of the face, the stomach and body, and by the heavy eyes.

One who partakes of the proper amount of food usually has a clear complexion, a clear bright eye, a small abdomen, and generally presents a keen, alert appearance, indicating vitality and energy.

One in normal health may eat in moderation anything that pleases the appetite.

It is, however, important that food be taken into the system only in proportion to its needs, and its power of dissolving in the stomach and intestines by means of oxygen breathed into the system; if the limit be exceeded the mass of food in the digestive cavity becomes poisonous and causes irritation to the whole system and loads the blood with particles which destroy its ability to nourish the organs and the nerves.

The assimilation of food and its value to the system depends largely upon the condition of the nerves. Food should never be eaten when the mind is excited ar during anger, fear or discouragement. Be cheerful and happy during all meals.

If you breathe properly, and remain from four to eight hours out of twenty-four in the open air, you may digest anything your appetite craves. Food will not digest if eaten without an appetite.

Asked what to eat, a prominent physician recently wrote for the daily press as follows:

"The secret of proper feeding may be told in one word—moderation. Moderation as to quantity, as to selection and as to frequency of meals. I may also add moderation as to the mental condition under which the food is eaten."

Dietary theories there are without end. Every day sees one born. Happily, almost every day sees one die. So you see it might be worse. Suppose all these theories lived.

One man says eat raw foods and nothing else; another insists that you eat only vegetables. Still another allows you only those vegetables that grow in the sunlight.

Another would force down your unwilling throat prodigious quantities of milk. One says, "Never mind chewing;" another frantically adjures you to go about all day chewing, like a contented bovine being relieved of her surplus lacteal fluid. One warns you against the use of water, which he claims is quite unnecessary. He doesn't tell you, though, where the body shall get the four quarts of water which it pours out daily, and lastly, to end the harrowing tale, comes the ingenious charlatan, who insists that nice red sand is an essential article for food, and assures you that he sells the only sand in the whole world that is really fit to eat.

And in this pandemonium of ignorance, fanaticism and quackery the merely mortal man stands bewildered. What shall he eat, how much, how often? How shall he feed his children?

Now, here's an attempt as the truth of the food question:

In diet there are three factors. First and most important is the mental conditions under which the food is eaten; second, the condition of the organs into which the food

is put; third and least important the kind of food eaten.

Food eaten when you are excited, hurried, angry or anxious, will not feed the body—no matter how good that food may be. Food taken into a stomach that is irritable, catarrhal or inflammed will not digest. "I came a thousand miles, doctor, to ask you what food I could eat without being distressed." And I answered: "There is no food that will not distress your stomach—now. The trouble is with the stomach—not the food."

And then the food? What shall we eat? Cereal with cream, fruit, bread and butter, possibly a raw egg in a glass of milk—that for breakfast. Peas, beans or lentils, or possibly meat; baked potatoes, rice or other cereal; a plain salad, fruit, bread and butter—that is all you need for dinner. Two light meals, unhurried, eaten in an atmosphere of calmness and kindliness. And that's really all I know about diet."

The same authority writes:

"If we study those who have lived 'long in the land', we shall find that they differ widely in almost every particular. Some were incessantly active; others never left their native valley. Some were what we commonly call 'good'; others were what we are agreed in calling 'bad'. Some were virtuous; some were vicious.

But, with all these differences, we find certain peculiarities of body and mind common to all those who attain great age. We find, also, that these same peculiarities are just those which from a scientific standpoint, would be likely to preserve the body.

I may remark that an exhaustive study of the aged, which I made some years ago, fully establishes the principles which I now advocate.

To speak first of all of the bodily characteristics of those who reach advanced age, I have found three which are most striking and important—an erect carriage, a broad, full chest, and a habit of slow, easy movement.

These I found in every case examined.

What is the connection between these bodily peculiarities and old age? A very direct one. Take the erect carriage and the

broad chest—which means an expanded trunk. The trunk contains the vital organs, heart, lungs, stomach, intestines and others. Now, all these organs do their work by vigorous motion; and for this motion they must have space. In the erect, expanded body they have this space, they do well their task of digesting the food, of making, propelling and cleansing the blood, of antidoting and excreting the body poisons; and so health, strength and long life are the natural result.

Then we have the habit of easy motion. I have seen men of 90 as vigorous, active and full of initiative as a boy of 20; but I never saw a man or woman of 90 who was stiff, rigid or excitable in movement. Always they have been quiet, slow and controlled in their motions—not necessarily from weakness, but from life-long habit.

And here again the reason is obvious. Rigid, hasty motions expend the vital force, and hence tend to early decay and death.

Another noticeable peculiarity of the monogenarian is that they are all light eaters. I never found an exception.

Lastly I may mention the mental state. Calmness is an almost invariable characteristic of those who reach extreme old age.

This, too, is only as it must be; for mental inquietude disturbs all the functions, lowers the vital powers and therefore prevents the attainment of long life.

So, if you would attain long life, take such exercises as will expand and uplift the body and insure an erect carriage, learn to move easily, and make it a habit to keep the mind in a state of calmness; for in these things lie the secret of long life."

### **BATHS**

It is a matter of vital necessity that the skin be kept clean in order to keep the pores open and healthy.

A good bath once a week will keep the skin in normal health, but a daily cold water sponge bath will do more than this: It will stimulate all the censory nerves which are located in the skin, and through them improve the circulation and move all the organs and parts of the entire anatomy to vigorous healthy action.

It is an absolute specific for nervous and stomach disorders; it is an excellent liver and bowel stimulant; the best preventative and cure for colds and catarrh and a most excellent tonic for the entire system.

Those who are unfamiliar with the refreshing exhilerating effects of a daily cold bath often shudder at the thought of exposing the body to cold water, due wholly to the fact that they do not know how to per-

form this delightful ablution, for there is nothing disagreeable or uncomfortable about it if properly done. The cold bath should always be taken immediately upon arising in the morning, with the following directions: the bath room should be warmed to 70 degrees for the beginner; a sufficient amount of exercise should be taken to start the circulation, enough to warm the body until the skin is moist, or better still, until perspiration begins; then wet a large sponge or cloth and quickly run over, in the order named, the feet, legs and arms, face and trunk of the body, then promptly wipe dry and rub briskly with a coarse towel until the skin is aglow with warmth.

Always continue to rub the skin with the dry towel until reaction from the cold douche has taken place, that is until you feel thoroughly warm and comfortable, then drink a glass of cold water and you will be cleansed both internally and externally, and you will find yourself in most evcellent condition for the work of the day. It is the most delightful, most refreshing and exhil-

erating tonic, which will make one feel as if he might live forever.

A clean, well kept body inside and out is a prime source of health and comfort, and is highly conducive to longevity.

## **TEMPERATURE**

The effect of heat upon the system is relaxing, restful, enervating, debilitating.

The effect of cold is bracing, invigorating, stimulating.

Extremes of either if long continued are unfavorable to health and long life.

A long continued moderate temperature, such as is found in Honolulu, for instance, is depressing and debilitating; the animal body requires constant change and is highly benefited by changes in temperature.

When long subjected to intense heat the system forces too much water through the pores for evaporation; respiration is much diminished and depressed, which results in a retention of materials that are not completely reduced to carbonic acid, water and urea, and the process of elimination terminates at a point called biliousness.

Long continued exposure to cold is less disastrous than heat, although it overstimulates and overworks the system until it becomes an apparatus for the combustion of carbon.

Changes in temperature impress the system in a manner that modifies its vital actions similar to physical exercise.

All parts of the surface of the body are filled with sencory nerves, which convey the impressions to every portion of the anatomy, and produce a definite effect upon the organs and functions its first and most direct effect being upon the heat making process.

A low temperature causes increased respiration, which is the first process of creating heat in the body; the effect of a cold atmosphere infuses the system with vigor and elasticity. If, however, respiration is not increased by exposure to cold, then the system will be injured by it.

Colds, are caused in this manner, but are due to the fact that respiration has not sufficiently increased to supply the necessary heat in the body, and to throw off the waste matter. The blood, loaded with materials to be discharged, fills the capillaries of the respiratory membranes and not meeting with a sufficient amount of oxygen is necessarily retained, causing congestion of the membranes and the many distressing symptoms familiar to those frequently afflicted with colds.

Continued exposure to a cold atmosphere is, however, the best cure for a cold. It increases respiration and fills the lungs with fresh air, eliminates the impure matter with which the blood is loaded, and prevents the recurrence of colds.

Cold is really a misnomer, for it is in fact a condition of the system which is necessary to relieve the injurious matter; and there is no means so effectual for a cure as an exposure such as apparently brought it on.

The conditions which cause colds are, a surplus of materials requiring a large quantity of oxygen for elimination; these are forwarded to the respiratory passages by the normal stimulus which is not sufficient to throw them off.

The logical remedy is exposure to cold atmosphere, vigorous exercise and deep full breathing; it is also a sure protection from colds.

Sudden changes in temperature are like physical exercise to the system and although they are generally regarded as a severe ordeal, especially by those in poor health, they are really of great value to human health and happiness. A sudden change to cold weather tones and stimulates the system, while a change to hot weather relaxes, rests and sooths.

### WHAT TO WEAR

Clean and proper clothing is a necessity to health and strength, for the skin can not be kept in a healthy condition without proper protection, and it has a highly important function to perform.

All the sensory nerves are located in the skin, and its surroundings, therefore, materially affect the entire anatomy.

Clothing that comes in direct contact with the skin should be changed at frequent intervals, according to the variable conditions of life; it should always be changed when it becomes infected with the impurities of the body. In cold weather twice a week is sufficient to maintain a condition of cleanliness and health of persons who perspire little and bathe frequently, and whose occupations are in clean apartments or out of doors.

In hot weather when the pores of the skin are performing their fullest duties, daily bathing and a change of clothing are absolutely necessary to comfort and health.

### PROPER CLOTHING

Is the character and quantity required to maintain comfort and health.

Either linen or woolen may be worn next to the skin. Authorities on this matter are about equally divided. Those who favor linen claim that it absorbs the moisture which the skin is constantly throwing off and that it therefore keeps it dry and clean, and that it does not irritate the skin, that it is more comfortable and fully as warm and infinitely cleaner.

Advocates of woolen underwear claim that the skin should be kept moist and cool; that woolen will not absorb moisture and that it, therefore, leaves the skin with its natural moisture while the clothing is dry.

Textures of an open porous character that will ventilate the skin and surround it with fresh air, should be selected.

Underwear should never be heavier than is necessary to maintain a comfortable tem-

perature of the body.

In summer it should be thin enough to permit the air to vitalize the skin, for pure air is as necessary to the skin as to the lungs.

In a reasonable measure the same is true during the winter season. It is an erroneous idea to assume that extremely heavy underwear is necessary to comfort and health in cold weather. As a matter of fact heavy underwear is not only unnecessary, but it is positively unhealthy, and therefore does not contribute to bodily warmth.

A very thin open mesh texture of either linen or woolen for summer underwear, and light woolen fabric for winter will be found most comfortable and healthful for most persons of normal health.

Wear no more clothing at any time of the year than is necessary to keep warm and let the air reach the skin as much as possiple.

Heavy clothing renders the skin tender and sensitive and lessens the strength and vitality of the body.

Those who spend most of their time in-

doors are approximately surrounded with the same temperature in winter as in summer, and, therefore, are not in need of heavier clothing, except outer garments or wraps, which should be changed with the weather and should always be sufficiently heavy and warm to meet the changes and conditions of temperature.

Taking cold in changing clothing is due to the fact that the skin has too long been subjected to heat and has been deprived of air.

# MENTAL AND PHYSICAL ACTIVITY

MENTAL AND PHYSICAL ACTIVITY is life,—idlness, death.

When the effete matter of the system is thrown off regularly and promptly by the use of all the parts of the body, it will immediately be replaced with new matter; this well settled principle of organic life would indicate that one need never grow old, but on the contrary may ever renew youth and renew and reinvigorate the whole body so long as every part of the anatomy is used properly. This is literally true as long as mental and physical activity is maintained in proper proportion, without undue waste or excitement.

The great barrier to extended youth is the mental limitation to maintenance. is the custom to regard each of the passing years as necessarily creating a certain inevitable mental and physical condition in all persons.

At each of these recurring natal anniversaries or milestones to the grave, one or more of the youthful thoughts or pastimes are bandoned, until the individual, growing older all the while by reason of abandoning those mental and physical characteristics that would have perennially renewed his youth, rests in the shadows of old age and patiently awaits the grave.

The inordinate desire to acquire a competence that will enable one to retire and enjoy life, the mad rush to finish one thing and begin another to pass time away from one day to another, is rapid progression to old age and its infirmities, and inevitable sorrows; it is time's natural flight to dissolution and death.

The principles of life teach the natural philosophy of content, of work and play, of mental and physical labor and recreation, each in turn bringing their own reward of decay and renewal of the tissues and fibres.

A gentleman with sufficient means to retire was superstitious that those who had attained earthly happiness usually died and kept on year after year slaving with no purpose other than the postponement of the day of doom, always noting the death of his wealthy friends who had quickly passed away after retiring. His advancing years and increasing wealth and its corresponding responsibilities led him in time to abandon his activities. The change to a life of rest and ease promptly reacted upon him, as it had those of his wealthy associates, and he, too, soon passed to the realm beyond. His superstition, however, was an incomplete idea of well known scientific principles, which require the constant use of every organ and muscle of the body and brain, and when retirement meant the disuse of any of the parts of the system, they necessarily decaved one by one, until the whole structure became involved and at last gave way.

Idleness, leaves the body and all its intricate parts without the functions for which they were intended, and without use they must soon fall to decay, and it is merely a matter of time when death must necessarily ensue.

It does not, however, necessarily follow that one must work to the end of his days, but on the contrary every human being is entitled to a period of retirement from the arduous turmoils of life, but if he would prolong that period he must use all his physical and mental faculties that they may be maintained in proper condition, of health and strength.

David Graham Phillips, author of "Old Wives for New" aptly illustrates this principle in one of his characters, a successful physician of the modern school who tells his wealthy patient that she must walk ten miles every day. "I ride infinitely more than that in my automobile, but am unable to walk", replied the offended patient. "Madame," said the doctor, "life is a steady journey to the grave, and those who ride will get there a long time before those who walk."

### REGULARITY IS MONOTONY

The greatly vaunted value of regularity in living is largely overestimated, if not an absolutely false theory.

Clocklike regularity in eating, working and sleeping is as disastrous to health as extreme irregularity; the best results are obtained by moderation in all things.

One who eats three meals a day at regularly fixed periods generally overloads and clogs the system, for need of food depends upon the condition of the body, the amount of mental and physical labor performed, the amount of fresh air consumed, the temperature of the atmosphere and the state of the mind, any or all of which affect the appetite and the demand of the system for food and its ability to assimilate and digest it.

Those who eat only when the appetite calls for food will enjoy the best health, provided, however, that the digestive organs be given sufficient exercise to maintain health and

strength; one full, complete meal each day will keep them in good condition, and if the appetite calls for no more it is enough; the vast majority of people, however, have an appetite for three moderate meals a day.

Regularity in working is a necessity to most people, but those who are so fortunate as to work when they please will find infinitely more enjoyment and better results in suiting their own moods for work and recreation.

The old theory that an hour of sleep before midnight is worth two afterward, has long ago been exploded. Sleep when you feel like it, or as it may suit the requirements of your environments, but never deprive yourself of five to eight hours' sleep, out of every twenty-four, if you can avoid it.

A gentleman who had led a regular proper life for many years, living always in the same house, performing the same duties and functions at fixed moments, over a long period of time, consulted a prominent physician for an ailment that had no clearly defined form. The physician advised him that he

had no organic trouble, and that he needed only recreation and change of climate, and suggested a journey to Europe; "But, I am unable to go to Europe," replied the patient. "Then go to the seashore for a few months," suggested the physician. "This I cannot do either," said the patient; "Move, then," said the physician, "do anything which will give you a much needed change."

Some variation that will relieve monotony is a necessity to every life. It is a well known fact that the system becomes enured to the things to which it is daily subjected, and in time becomes impervious to the monotinous habits of life.

The same food, air, water, scenery and work in time lose their effect upon the system and a change is required.

One who has become ill should seek the cause, and failing to find it should change his mode of living entirely, and will probably find great improvement in any change, especially from one part of the country to another, from mountain to seashore, or from the prairie to the woodland; any change that will afford the scenery atmosphere or

product of another locality.

The whole family is greatly benefited by a change to a summer home, and those who are unable to maintain such luxuries may at least enjoy a change by erecting a tent in some nearby suburban resort, or by some lake or stream. Such a change removes one from the rut into which the majority drift; the removal to the summer home and back again to the winter home in autumn each time gives new life, and revives new hopes and inspiration, and changes the entire system. Any change is better than a sordid sameness of diet and ideas, which prevent the system from throwing off the old matter to make room for new tissues.

### **EXERCISE**

Rapid motions stimulate and excite the nervous system; slow motions soothe and quiet the nerves.

Persons of a phlegmatic, drowsy temperament, therefore, need exercise consisting of quick motions, while those of a nervous temperament should never move hastily but always slowly, deliberately and methodically.

There are a large number of natural exercises and means of maintaining health and strength, such as walking, dancing, golfing, automobiling, sailing, rowing, hunting, fishing, billiards, bowling and tennis.

### WALKING.

is doubtless the best single form of exercise. It is assumed, of course, that it will be done in the open air which fills the lungs with oxygen and vitalizes the blood, and pure rich blood nourishes every organ and nerve of the body.

Walking is the best form of exercise to improve the circulation; it especially carries the blood to the extremities, to the feet and hands, and relieves the pressure on the brain.

It causes the blood to circulate freely through the skin and lungs to refresh, nourish and invigorate these parts, strengthens the spine and relieves all tendency to congestion of the internal organs, and the head.

It affords the most perfect condition for mental action and enjoyment.

The rich and poor alike may enjoy this highly important recreation and pleasure without expense or loss of time, in fact more than half of mankind will save expense and time by walking instead of riding to and from their daily occupation.

The majority of those who ride in overcrowded street cars filled with foul air that has been inhaled a hundred times by many individuals, could walk in the time that is consumed in this noxious atmosphere.

Everyone should walk at least four miles a day, and any day he robs himself of this delightful healthful pleasure, he shortens his life. Gladstone said it was his lifelong custom to walk eight miles every day, and his mental and physical vigor and his usefulness to his country up to the age of eighty-four years which is a quarter of a century beyond the period at which Osler says a man should be chloroformed, proves the value of this form of exercise.

Walk erect with the shoulders thrown back, that the lungs may perform their work fully and freely; take a measured deliberate step; short quick steps use up nervous force and a long, slow, measured stride is easier and more graceful and builds up the nerve force. Hill climbing is an absolute specific for stomach disorders, pulmonary troubles and nervousness. Companionship adds immeasurably to the mental stimulus.

If you walk alone, interest yourself in things which are to be seen along your journey and you will reap much more benefit from it; the scenery through the country or even the commonplace things in the city will prove restful and soothing to the mind and to the nervous system.

#### DANCING

is a most delightful and exhilerating form of exercise to both mind and body, which should be cultivated in every family as an antidote to the effects of the toil and worry of modern life. It exhilerates the mind and gives expression to a feeling of abounding health, which it undoubtedly creates and helps to maintain. It has the advantage of most other exercises in being social. Being accompanied by music, both mental and muscular powers are united in the same movements, effected without much exertion of the will so that it secures a large amount of exercise without much fatigue. It harmonizes with the general plan of the movements of the body.

### **GOLF**

is a royal form of exercise; in addition to the mental stimulus afforded by the necessary sociability of the game, it has the advantage of fresh air and sunshine, amid the most pleasing environments of nature; it brings into use practically all the muscles and parts of the body; increases respiration, expands the chest and improves the circulation.

### AUTOMOBILING

is passive exercise, which refreshes the mind, and furnishes an extended supply of fresh air, and stimulates the nervous system, but it furnishes little exercise to the muscles and organs except such as is afforded by getting in and out of the car and that which is necessary to maintain equilibrium.

### SAILING

furnishes mental recreation, abundance of fresh air and sunshine, and a considerable amount of physical exercise in hoisting, reefing and adjusting the sails, in handling them and in guiding the craft, and in the multitude of positions in which it is necessary to sit and stand.

### ROWING

exercises the muscles of the arms thest and abdomen and to some extent all the visceral organs, and all the muscles of the legs and feet. It is one of the best forms of exercise, especially for those who enjoy it.

### HUNTING

usually takes one to the bosom of nature, to the forest, prairie or mountain, lake or stream, where the air is pure and fresh; here one must necessarily forget and enjoy a complete change of scenery and diet. The long tramps and the excitement of the chase are of inestimable value to mind and body, and he is indeed a fortunate man who has inclination and opportunity to spend two weeks in this delightful pastime at least once a year. It is most refreshing and invigorating and eminently refits one for the trying ordeals of life.

### FISHING

offers all the advantages of hunting, except that it affords less physical exertion, and, therefore, lacks the benefits of muscular exercise, but is soothing to overworked minds and to the nerves, and may be indulged in by those of less vigor and strength. It is of great value to mental workers.

### PHYSICAL CULTURE

A large number of intricate gymnastic exercises are not at all necessary; a few simple forms that will gently move all the organs, muscles and nerves will maintain complete health of those who are already favored with it, and will restore to normal health all who have no organic disease.

The following brief and simple forms will bring every part of the anatomy in use:

First—Breathing exercise.

Second—Stretching the body.

Third—Stooping forward.

Fourth—Leaning backward.

Fifth—Reaching sideways—downward.

Sixth—Twisting the body.

Seventh—Supporting and raising the body on hands and toes.





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Eighth—Throwing head and trunk backwards and forward, arms outstretched.

Ninth—Rotating legs while lying on the back.

### BREATHING EXERCISE

(Fig. 1.)

is most important, and if you do nothing else, do this at least twice a day: stand erect, empty the lungs, raise the chest, draw in the abdomen, stand as long as you can without breathing, then take a long, deep, full breath in three inseparable parts—the first of which should fill the lower part of the lungs, then the central part and the last, which is the complete breath, will fill the upper part. If you fill the upper part of the lungs first you cannot then reach the lower parts; when the air fills the lower parts the diaphram presses on and gently exercises the abdominal organs.

When breathing is incomplete the blood is not purified—it does not circulate properly, the organs, muscles and nerves are not nourished, the secretions become clogged, the appetite is poor, and colds or fevers en-

sue. Tuberculosis is largely due to improper breathing, because the blood does not receive a proper amount of oxygen and is loaded with impurities that it cannot discharge. The logical cure for it is to enlarge the chest and the mobility of its walls, and fill it with pure air, breathing deeply and fully, a large quantity of fresh air.

### STRETCHING THE BODY

(Fig. 2.)

this lifts the lungs and visceral organs from the disposition to sag and drop to an unnatural position. It requires considerable exertion to maintain this position for any length of time, and a strong will power is exerted. It equalizes the circulation and the nerve and nutritive forces and stimulates all the powers to harmonious action, drives the blood towards the skin and feeds the capillaries.





### STOOPING FORWARD (Fig. 3.)

stretches the muscles of the legs and the back, gives a condition of suppleness to the whole system, reduces the abdomen and brings many muscles and parts into use that may not otherwise be used at all. It is excellent exercise for the visceral organs. Keep the legs from bending, stoop over slowly until the hands touch the floor. It is difficult to those unaccustomed to it, but is easily acquired with a little practice.

### LEANING BACKWARD (Fig. 4.)

standing erect, right foot forward, arms outstretched, bend the body backward as far as possible, slowly, and hold it in this position for a few seconds, then return to the erect position and place the left foot forward and bend backward the same as before.

This expands the chest, strengthens the

back, clears the head, warms the hands and moves the kidneys, spleen and other visceral organs and relieves backache.

### REACHING SIDEWAYS

(Fig. 5.)

Downward. Stand erect, arms down, reach downward on the right side first, bending the body sideways as far as possible, then slowly resume natural standing position; repeat the same motions on the left side. These motions act upon the muscles of the sides and the back, and upon the liver, kidneys, spleen and other visceral organs and on the walls of the stomach.

### TWISTING THE BODY

(Fig. 6.)

Stand in a natural position; turn the trunk and head to the right as far as possible, resume natural standing position slowly; then repeat the movement to the left. This motion strengthens all the muscles of the back, and moves the visceral organs and acts especially on the liver for which it is especially intended.





Another excellent but simple exercise for the liver is to walk around on hands and feet, bear fashion.

### SUPPORTING AND RAISING THE BODY ON HANDS AND TOES.

(Fig. 7.)

Lie flat on your stomach on the floor; while your body is straight and rigid raise yourself on your hands and toes. This movement produces a tension and contraction of the entire front part of the body and acts directly upon the muscles of the abdomen and back. It is the best cure for backache and relieves inflammation or displacements of the rectum, vagina or womb.

# THROWING HEAD AND TRUNK BACKWARDS AND FORWARD . . ARMS OUTSTRETCHED.

(Fig. 8.)

Start with a natural standing position; then hold the arms up straight over the head, throw the trunk and arms back with a swinging motion as far as possible; then forward with the same swinging motion as far as possible. This motion stimulates the circulation, exercises all the muscles of the back and forward part of the body, and gently acts on the spine and visceral organs.

### ROTATING THE LEGS WHILE LY-ING ON THE BACK.

(Fig. 9.)

Lie on the floor on your back; raise the legs in a rotary manner, making as wide a circle as possible. Revolve the legs from right to left slowly and then reverse from left to right. This motion acts upon all the muscles of the thighs, hips, the lower portion of the abdomen and back, and also on the rectum, uterus, bladder and especially upon upon the spinal cord. Any exercise that strengthens the spine greatly benefits the whole system, and this is one of the best movements for that purpose.





### HEAD MOVEMENTS.

(Fig. 10.)

Turn the head slowly to the right as far as you can, then to the left in the same manner. This exercises all the muscles of the neck and improves the circulation in the head.

Bend the head slowly forward as far as possible, and then backward in the same manner.

Bend the head sideways, first to the right, then to the left, each time as far as possible.

Revolve the head in a circular manner, first forward then sideways, in a circle, then backwards.

All these exercises of the neck and head increase the circulation and relieve congestion, and cure headache, and affections of the eye, ear, throat and nose, and spine.

The number of times that all movements may be taken depends upon the health and

strength of the person. If you take all of the exercises mentioned in this treatise twice is sufficient for the first time, but this may be increased daily as the strength by exercise will increase. About two to five minutes, time is sufficient to restore health and strength and to maintain it.

The principal thing is to use all the muscles and organs and parts of the body every day.

It is said that muscular action changes the fluids of the body from place to place, like squeezing a wet sponge, and relieves stagnation and congestion, which are the chief causes of all diseases.

### DIET.

Proper diet and exercise creates a healthy condition and therefore reduces corpulency of those who are abnormally fat and increases the weight of those who are too thin.





### DIET AND EXERCISE FOR REDUC-TION OF CORPULENCY.

Let the stomach be entirely empty before eating; to this end meals should be at least five hours apart; as, for instance, if you breakfast at eight you should not eat lunch before one o'clock, and dinner before six.

Eat lean meat of any kind, except pork, and any kind of green vegetables, and a reasonable amount of stale bread.

Omit soup, fish, starchy food and sweets. Lettuce, spinach, raw cabbage, celery, onions, oranges, apples and peaches are especially valuable.

Drink a very small quantity of water or coffee or other beverages while eating; drink large quantities of water and up to within one hour of the next meal.

Skipping the rope or the same motions without the rope, especially in the open air, is an excellent antidote for corpulency and is a firstclass means of improving the circulation.

The following exercise which is more difficult and laborious is a specific for corpulency:

Lie flat on the floor, shoulders, spine, calves of legs and heels touching the floor, hand clasped behind the head at the base of the brain; relax the system in an easy restful position; now close the lips and inhale through the nostrils, raise the right leg up four times, slowly, then exhale and raise the left leg four times while inhaling.

Rest exhaling and alternate the right and left leg eight times while inhaling; exhale, rest, and repeat the entire exercise.

Now stand erect, heels together, toes out, chest high, abdomen in, chin on a line with the body; inhale deeply on four counts and raise your hands above the head; palms forward, arms apart the width of your chest; now exhaling forcibly, swing forward from the waist, keeping the arms stiff and bending as far as possible; after practicing for some days you will be able to touch the floor with the palm of your hands, by which time you will find your waist longer and smaller and your obdomen greatly reduced.

For the final exercise you will need a bath towel at least a yard long. Lie flat on the floor, face downward, with the towel stretched as far as possible over your head. Now, inhaling deeply, fling the towel backward until it catches around the ankles. This forces the body to form a sort of cradle with the trunk and particularly the abdomen as the single rocker. Then rock from side to side at least ten times, inhaling and exhaling regularly. The more deeply you draw your breath, the more good the exercise will do you. If possible take this exercise on a bare floor that is absolutely clean, avoiding the dust which accumulates in rugs or carpets.

Give fifteen minutes night and morning to these exercises.

A man who was so much over weight that he could not get insurance was greatly distressed and began to collect circulars of remedies for reducing fat and was much impressed with the fact that while they all claimed their own remedies the only one to reduce weight, yet they all agreed to the fact—that diet and exercise were an abThin people are greatly benefited by deep breathing and physical exercise, which circulates the blood naturally and properly; slow, easy movements are best.

Drink large quantities of pure water and eat freely of starchy foods and vegetables of all kinds.

A moderate amount of water taken at meals has a strong tendency to fatten.

### TO FILL OUT THE NECK.

A simple exercise which is supposed to be quite marvelous in its results in filling in the hollows of a scrawny neck: Before the sun is high in the morning arise and stand before the open window, Then draw in deep, strong breaths of the clear morning air. Then after several deep breaths have been drawn rise to the toes and draw in as much air as the lungs will hold, and keeping the mouth tightly closed, force the breath against the neck and throat muscles. the while fifteen is counted. Then as the heels are slowly lowered to the ground the breath should be exhaled forcibly through the mouth. This exercise is really excellent for building out hollows. At first this exercise is apt to make the ameteur beauty seeker dizzy; the reason for this is merely because oxygen in such quantities is forced into the lungs that the little air cells that have formerly been empty are filled up with

the fresh, invigorating air. This causes such a rush of blood at such a mad pace that one is for the time dizzy with the exhileration. If this exercise is practiced every night and morning ten times in succession you will notice an improvement in two weeks.

Here also are some neck exercises which will develop the shrunken tissues:

Drop the head gently backward as far as possible, then bring it forward as far as possible, repeating the movements ten times; practice the same motion first on the right side, then on the left, breathing deeply all the while. A cool, fresh atmosphere is a great assistance.

Rheumatism, neuralgia, catarrh and consumption are chronic diseases which prevail generally; they are all due to impure blood, that is, an overloading of the blood with too much food, or improper elimination, or a deficiency in the quality of the blood, which can be relieved only by an ample and continuous supply of fresh air and exercise which throw off the impurities of the blood and improve the quality.

Cancer arises from the same causes: the imperfectly digested food products are forced into the circulation, when the tissues are unable to assimilate them, and the organs of eliminating are unable to throw them off, and the dross is deposited in the textures of some organ. Cancer generally attacks the glands which are organs of absorption and secretion.

## ANOTHER SYSTEM OF EXERCISES

Prof. Martin E. Rockwell, who has taught the Ralston Movement Cure many years has prepared the following course of exercises, the entire plan of which is founded upon some principle of Nature. These exercises form a perfect system, and they employ, one after the other, every muscle in the body from feet to head. As soon as one muscle or set of muscles is set in motion, another is operated; and so on in succession from part to part. The pupil will find that the exercises tire without exhaustion and that an amazing power of vitality is derived from the continual shifting of action from one set of muscles to others; in turn, producing, instead of weariness, a constant exhilaration and increase of strength. These exercises will distribute the nutrition throughout the body perfectly.

The first essential is to get the spirit of play as much as possible. Second, be sure the body is in poise at the beginning of every exercise. Third, inhale while tensing the muscles: exhale when the muscles relax. Fourth, tense the muscles in the part of the body used—as tightly as possible; then relax. The plan of the course is to exercise the muscles of the legs first so that the body may be able to sustain itself for hours on the feet. Then follow exercises for different muscles or parts of the body, as follows: Foot, ankle, knee, hip, waist, chest, shoulders, arm, hand, neck.

To produce gracefulness and pliability of muscle, we then adopt the whole-body movement, which employs all the muscles in the entire body at once. To arouse the vital organs, to strengthen the heart, increasing respiration, we adopt the rapid movement, and the light step. To relieve the strain on the used muscles and to aid in the distribution of nutrition we have the devitalizing or relaxing exercise. Then as a final balance we have the artisan and imitation movements, making a series of seventeen.

To exercise in the open air is always best. To reduce the weight, exercise before eating; to build up the body, exercise one-half hour afterwards.

#### LEG MOVEMENT.

(Figure 11.)

First, POISE.

Second, take a standing position with the feet about three-fourths of a yard apart. On count One, sway the body on the right knee, as in the illustration, keeping the left leg perfectly straight. On the second count, reverse the movement by turning easily on the toes and bending the left knee with the right leg perfectly straight. The beginner should use the feet flat upon the floor but as he grows stronger the weight should be poised upon the toes entirely. Repeat the swaying 32 times, or until the leg muscles become tired.





#### FOOT EXERCISE.

(Figure 12.)

First, POISE.

Second, on count ONE raise on the toes; on count TWO take standing position. Repeat 32 times. For advanced work hold the poise as long as possible on the toes. A pleasurable variation is to rock back, lifting the toes, holding the poise on the heels. This will bring into use another set of muscles.

#### ANKLE EXERCISE.

(Figure 13.)

First, POISE.

Second, take a standing position such as will place the feet in a straight line, the heels touching and the toes turned out latterly. On count ONE place the weight on the toes and turn the heels out latterly, as in the illustration. Return to the position as indicated with heels together on count two. Repeat until the muscles are tired.

As the pupil advances, raise the heels higher and higher, as the foot turns on the toes until finally the whole body is on the jump. This might be called an ankle dance.

#### KNEE EXERCISE.

(Figure 14.)

First, POISE.

Second, stand—arms akimbo—take a long stride forward, and on count ONE kneel slowly until the knee almost touches the floor; it must in fact just come to the floor without putting weight on it. Rise on count TWO, then repeat with the other knee. The new beginner should be careful not to overdo this exercise as he will be lame and liable to get discouraged.

#### HIP EXERCISE.

(Figure 15.)

First, POISE.

Second, on count ONE bend the body forward at the hips, keeping the knees straight. Raise on count TWO. Return to first position. Repeat 32 times.





#### WAIST EXERCISE.

(Figure 16.)

First, POISE.

Second, hold hips perfectly still so that a straight line must be preserved from the waist to the feet; bend the body on count ONE to the right latterly, as in illustration. Attempting to reach the ankle with the hand gives the exercise a play impulse. On count Two go back to poise; on THREE bend to the left; on FOUR, poise.

Stomach, liver and bowel troubles depend for their health on great activity around the waist. This exercise is most beneficial for maladies of the visceral organs; it also gives flexibility of the body, which is so essential in graceful walking. Nearly all persons bend at the hips. The exhilaration produced from this exercise will surprise the pupil. As a variation for advanced workers, hold the hips perfectly still and form a complete circle with the head and shoulders,

making the waist line a pivot for the same, as if following the inside of a hoop with the head. Repeat 32 times.

#### CHEST EXERCISE.

(Figure 17.)

First, POISE.

Second, place the palms of the hands at the side of the lower chest ribs. On count ONE exhale and contract at the side ribs. Pressing hard on the exhalation helps to force all the air out of the lungs. On count TWO inhale and expand as much as possible under the hands, pressing slightly with the hands on the ribs during the inhalation. This strengthens the lung cells. Increasing the range of breathing and oxygizing the blood greatly strengthens the heart.

# SHOULDER EXERCISE. (Figure 18.)

First, POISE.

Second, raise the arms in such a way as to produce right angles at the elbows, as in illustration. On count ONE lower the fore arms only, still preserving right-angle shape. This is done by turning the forearms over, using muscles at the shoulders





for the change. On count TWO raise arms back to first position. Repeat until tired before letting the elbows drop. The severity of the exercise is a surprise, but it soon makes a person thick-set and solid at the shoulders.

#### POISE.

(Figure 19.)

First, POISE.

Be sure before attempting any exercise to have perfect poise for exercise taken with the body out of poise is always detrimental. This exercise is taken by standing with the heels together, the toes apart angle of about 45 degrees, the weight on the balls of the feet. Imagine that you are standing directly under a shelf just a little higher than the head, and then try to reach this shelf with the head. To avoid lifting the shoulders instead of the chest place the hands out straight as though resting on a table in front of you. At the same time you are lifting up the shelf with the head press down on the table with the hands. If you are now able to rise on the toes without the movement of the body,

forward or backward, the body has the correct position. If done properly the pupil will be conscious of a desire to open the chest and inhale deeply. If the pupil is careless and merely puts the hands down straight, the shoulders will come together in front and a construction of the chest experienced. This exercise is the best that can be devised for straightening the spine.

#### ARM EXERCISE.

(Figure 20.)

First, POISE.

Second, extend the right arm as in the illustration, the fist being clinched and palm-side down. On count ONE turn the arm over so that the fist will have its palm-side up. On count THREE turn it down; and so continue for thiry counts with one hand, and the same number with the other.

This is a specific movement of the arm and its direct supporting muscles. Great pleasure may be experienced by observing the law of tension and relaxation.





#### HAND EXERCISE.

(Figure 21.)

Second, hook the fingers together and extend the hooked hands as far to the front as possible, on a level with the shoulders. On count ONE bring the hooked hands in towards the chest, while pulling hard, as though trying to get them apart. This pulling must be by a lateral action of the elbows. On count TWO release the tension and extend them to the first position in front. Repeat for thirty-two counts.

#### NECK EXERCISE.

(Figure 22.)

First, POISE.

Second, with the hands at the sides, incline the head to the right on count ONE. The muscles of the neck must be tensed as the head comes over on the shoulder. A weak or flabby action is of no value. On count TWO release the tension and bring the head over to the left shoulder, again energizing the muscles of the neck. As a variation to this, following the same plan of tens-

ing and relaxing, bring the head forward with the chin upon the chest, on count ONE. On count TWO throw the head straight back with the chin toward the ceiling.

The vocal organs will be much strengthened by these exercises.

#### WHOLE BODY EXERCISE.

(Figure 23.)

This teaches the easiset way of taking the sitting posture upon the floor from a standing position, and it employs every muscle of the body in complicated action without departure from the laws of grace.

The pupil has an opportunity to test the benefits and pleasure to be derived from the use of tension and relaxation thus bringing relief to used muscles.

First take the position of POISE. On count ONE kneel on the left knee. On count TWO place the left hand on the floor. On count THREE sit as in the illustration. On count FOUR clasp the hands over the right knee. On count FIVE place the left hand on the floor, giving it part of the weight. On count SIX arise on the left





knee as in count ONE. On count SEVEN stand, putting the weight on the left foot. On count EIGHT stand.

Repeat the same movement, kneeling on the right knee. This taxes the vitality according to the speed in which it is performed. As the pupil advances this exercise may be performed in a very few seconds, but care must be exercised not to overtax the heart. In doing it rapidly rise from the floor and stand erect and sit again as quickly as possible.

#### RAPID EXERCISE.

(Figure 24.)

First, POISE.

Second, clinch the firsts as tightly as possible; hold the left arm perfectly still and rotate the right fist around it with the utmost speed and then hold the right arm still and rotate the left fist around it. Now rotate both fists around each other; in order to give the same muscles a different action, reverse the direction.

Any rapid movement of muscle sets the blood throbbing quickly through the veins and the nerves respond by the feeling of life. This exercise is of the highest value in waking up a sluggish body.

# LIGHT STEP. (Figure 25.)

The light step tends to teach the quick and complete lifting of the body from the floor, in movements that are easy and graceful and with the least tax upon the general vitality. If a pupil is suffering from maladies of the heart he must proceed slowly because the facination of the exercise will carry him to exhaustion before he becomes aware of his condition.

## DEVITALIZING. (Figure 26.)

The most important part of all scientificphysical training is relaxation. This is a new practice. It consists of taking the lifeout of the body, or part of the body. In the present exercise stand in poise and with the arm firmly against the side shake the hand in all directions. Just let it hang limp at the wrist as though the fingers were stringstied to a stick. First, shake one hand; then the other and end by shaking both at once.

This removes soreness and stiffness and

is beneficial after all hard tensing exercises.

# LIGHT STEP. (Figure 27.)

First, POISE; support the body on the right foot; on counts ONE, TWO, give two jumps on the right foot, throwing the upper part of the body forward and the left leg as far back as possible, as in illustration. On counts THREE, FOUR, give two jumps with the right foot thrown forward and the chest facing the ceiling,—or just reverse from the step described.

The right foot always goes forward and the left always goes back, with a double hop on the foot that supports the body, making a rocking movement.

Be careful not to continue too long.

## ARTISAN. (Figure 28.)

In this movement all the muscles are brought into use. The knee is the anvil and the left fist on the knee is to receive the blow. Stand with rather a broad base and reach down and back as the dotted lines show; then lift an imaginary sledge from just back of the right foot, high over the head, tensing all the muscles in the leg, back, arm and hand of the right side at the start; shifting to the left side as the right hand comes down on the left hand. Repeat four times; then the sides are reversed.

All the muscles of the body are used if exercise is performed properly.

#### IMITATION WALL PUSHING.

(Figure 29.)

It requires skill to tense the muscles without actually using them. In this movement, push an imaginary wall and, as in the anvil movement, tense all the muscles then relax. Continue 32 counts.

As the forward movement is taken, if done slowly, and the tensing is gradual, the movement becomes magnetic.

















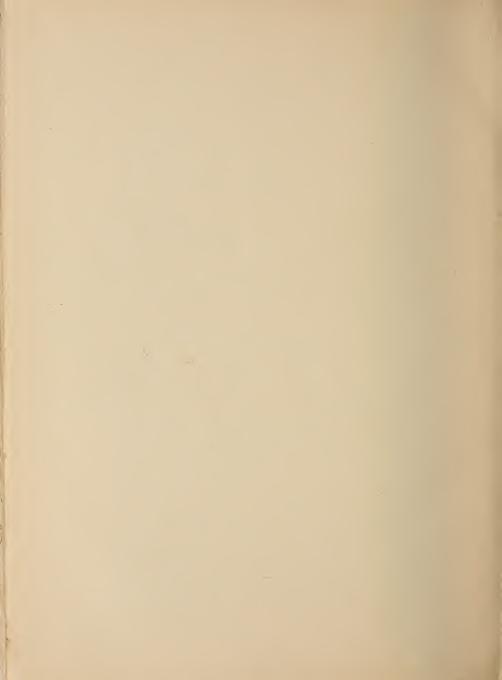
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